



PATENT

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### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN THE APPLICATION OF:

BILLY F. MCCUTCHEN ET AL.

APPLICATION. NO: 09/807,248

FILED: APRIL 9, 2001

FOR: SCORPION TOXINS

CASE NO: BB1208 US PCT

GROUP ART UNIT: UNKNOWN

**EXAMINER: UNKNOWN** 

#### INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

In compliance with 37 CFR 1.97 and 1.98, Applicants bring to the attention of the U.S. Patent and Trademark Office information listed on the enclosed PTO/SB/08. A copy of the information is also enclosed. Also attached please find a copy of an International Search Report from a corresponding foreign application and copies of those references cited therein.

Should any fee be required in connection with the filing of this Information Disclosure Statement, please charge such fee to Deposit Account No. 04-1928 (E.I. du Pont de Nemours and Company).

Respectfully submitted,

PAUL D. GOLIAN Attorney for Applicants Registration No. 42,591

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Encl.

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09/807,248
April 9, 2001
Billy F. McCutchen et al.
Unknown
Unknown
BB1208 US PCT

	U.S. PATENT DOCUMENTS								
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Examiner Initials *	Cite No. <sup>1</sup>	Number Kind Code <sup>2</sup> (if known)		of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear			
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	-	World	96/36712	A1	E.I. du Pont de Nemours & Company	11-21-1996		
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Application Number	09/807,248			ري ا
Filing Date	April 9, 2001	SEP	0 6	2001 😸
First Named Inventor	Billy F. McCutchen et al.	E.		
Group Art Unit	Unknown	Ve.		APKTER
Examiner Name	Unknown	7	ADE	AFF
Attorney Docket Number	BB1208 US PCT			7

	OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS						
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²				
!		PIERRE SAUTIERE ET AL., Toxicon, vol. 36(8):1141-1154, 1998, New toxins acting on sodium channels from the scorpion leiurus quinquestriatus hebraeus suggest a clue to mammalian vs. insect selectivity					
		HAIM MOSKOWITZ ET AL., Eur. J. Biochem., vol. 254:44-49, 1998, A depressant insect-selective toxin analog from the venom of the scorpion Leiurus quinquestriatus hebraeus					
		BALKISS BOUHAOUALA-ZAHAR ET AL., Eur. J. Biochem., vol. 238:653-660, 1996, A recombinant insect- specific alpha-toxin of Buthus occitanus tunetanus scorpion confers protection against homologous mammal toxins					
		MARK J. DUFTON ET AL., J. Mol. Evol., vol. 20:120-127, 1984, Classification of scorpion toxins according to amino acid composition and sequence					
		FRANCOIS MIRANDA ET AL., Eur. J. Biochem., vol. 16:514-523, 1970, Purification of animal neurotoxins					
		JUAN C. FONTECILLA-CAMPS, J. Mol. Evol., vol. 29:63-67, 1989, Three-dimensional model of the insect- directed scorpion toxin from androctonus australis hector and its implication for the evolution of scorpion toxins in general					
	-	NOAM ZILBERBERG ET AL., Journ. of Biol. Chem., vol. 272(23):14810-14816, 1997, Identification of structural elements of a scorpion alpha-neurotoxin important for receptor site recognition					
		ERIK JOHNSON ET AL., J. Neurogenetics, vol. 12(1):1-24, 1998, Genetic and pharmacological identification of ion channels central to the drosophila cardiac pacemaker					
		PETER A. FRIEDMAN, Annu. Rev. Physiol., vol. 60:179-197, 1998, Codependence of renal calcium and sodium transport					
		E. ZLOTKIN ET AL., Arch. of Biochem. & Biophys., vol. 240(2):877-887, 1985, An excitatory and a depressant insect toxin from scorpion venom both affect sodium conductance and possess a common binding site					
		E. ZLOTKIN ET AL., Biochimie, vol. 53:1073-1078, 1971, Purification and properties of the insect toxin from the venom of the scorpion Androctonus australis Hector					

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Group Art Unit	Unknown	
Examiner Name	Unknown	TRADEL RIVE
Attorney Docket Number	BB1208 US PCT	

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	η <b>Τ</b> 2
		NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 134335, 12-15-1998, GREGOIRE, J. ET AL., Covalent structure of toxins I and II from the scorpion Buthus occitanus tunetanus	
		J. GREGOIRE ET AL., Toxicon, vol. 21(1):153-162, 1983, Covalent structure of toxins I and II from the scorpion Buthus occitanus tunetanus	
		ORIETTA VARGAS ET AL., Toxicon, vol. 21(1):79, 1982, Neurotoxins from the venoms of two scorpions: Buthus occitanus tunetanus and Buthus occitanus mardochel	
		NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 102796, 09-30-1993, E. ZLOTKIN ET AL., Functional duality and structural uniqueness of depressant insect-selective neurotoxins	
		E. ZLOTKIN ET AL., Biochemistry, vol. 30:4814-4821, 1991, Functional duality and structural uniqueness of depressant insect-selective neurotoxins	
		NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 1041278, 08-21-1996, BOUHAOUALA-ZAHAR, B. ET AL., A recombinant insect-specific alpha-toxin of buthus occitanus tunetanus scorpion confers protection against homologous mammal toxins	
		B. BOUHAOUALA-ZAHAR ET AL., Eur. J. Biochem., vol. 238(3):653-660, 1996, A recombinant insect-specific alpha-toxin of buthus occitanus tunetanus scorpion confers protection against homologous mammal toxins	
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